CLAIM AMENDMENTS

1.(Original) A method of executing a leak control system (1) comprising at least one stop valve (2) with an associated flow meter (3) arranged in the supply pipe 5 (4) of the pipe installation, and at least one stop valve (5) with an associated flow meter (6) arranged in the return pipe (7) of the pipe installation, said stop valves (2, 5) as well as associated flow meters (3. 6) being connected to a control box (8), characterized **in** that the control box comprises
- at least one valve monitor (9) connected to each stop valve (2. 5) to control/record the possible state of the individual stop valve (2, 5): open or closed, and
- an executer which is started by the control logics of the control box in 15 consideration of the operating conditions of the pipe installation, and which performs a given sequence of actions during which it controls/monitors the valve monitors (9),
which leak control system (1), on the basis of start and execution of the sequence of actions. performs a number of measurements and data collections on the basis of which it subsequently evaluates the functionality of the stop valves (2, 5) and/or the elasticity and/or the tightness of the pipe installation.

2. (Original) A method according to claim 1, characterized in that the functionality of the stop valves (2, 5) during the execution of the given sequence of actions is determined in that:
- the executer applies a close command for the stop valve (2) in the 30 supply pipe (4) of the pipe installation and awaits the expiry of the transit time of the stop valve,
- the executer removes the close command for the stop valve (5) in the return pipe (7) of the pipe installation and awaits the expiry of the transit time of the stop valve, and during this period the valve monitor (9) for the stop valve (2) is active,
- the executer removes the close command for the stop valve (2) in the supply pipe (4) of the pipe installation and deactivates itself, following which the leak control system (1) assumes a normal monitoring state.

3. (Original) A method according to claim 1, characterized in that the control box (8) additionally comprises an analysis apparatus to record and analyze flow fluctuations in the pipe installation.

4. (Original) A method according to claim 3, characterized in that the functionally of the stop valves (2, 5) as well as control of the elasticity and the tightness of the pipe installation during the execution of the given sequence of actions are determined in that:
- the executer applies a close command for the stop valve (2) in the supply pipe (4) of the pipe installation and awaits the expiry of the transit time of the stop valve,
- the executer applies an open command for the stop valve (5) in the 25 return pipe (7) of the pipe installation and awaits the expiry of an adjustable period of time during which the valve monitor (9) for the stop valve (2) in the supply pipe (4) of the pipe installation is active, and at the same time a time track of the flow in the return pipe (7) of the pipe installation is recorded,
- the executer removes the close command for the stop valve (2) in the supply pipe (4) of the pipe installation, activates the analysis apparatus and deactivates itself, following which the leak control sys- tem (1) assumes a normal monitoring state.

5. (Original) A method according to anyone of claims 1-4, characterized in that the stop valve (5) in the return pipe (7) of the pipe installation is controllable.

6.(Currently Amended) A method according to ~~claims 2 and~~ claim 5, characterized in that the execution of the sequence of actions to determine the functionality of the stop valves (2,5) is initiated in that:
- the executer applies a close command for the stop valve (5) in the return pipe (7) of the pipe installation and awaits the expiry of the transit time of the stop valve during which the valve monitor (9) for the stop valve (5) in the return pipe (7) of the pipe installation is active.

7.(Currently Amended) A method according to ~~claims 4 and~~ claim 5, characterized in that the execution of the sequence of actions to determine the functionality of the stop valves

(2, 5) and the regular control of the elasticity and the tightness of the pipe installation are initiated in that:

- the executer applies a close command for the stop valve (5) in the return pipe (7) and awaits the expiry of the transit time of the stop valve, following which the executer keeps the stop valve (5) in the return pipe (7) of the pipe installation closed for an adjustable period of time during which the valve monitor (9) for the stop valve (5) is active, and at the same time a time track of the flow in the supply pipe (4) of the pipe installation is recorded.

8.(Currently amended) A leak control system (1) in two-stringed pipe installations for performing the method according to <u>claim 5</u> ~~claims 1-7~~, comprising at least one stop valve (2) with an associated flow meter (3) arranged in the supply pipe (4) of the pipe installation, and at least one stop valve (5) with an associated flow meter (6) arranged in the return pipe (7) of the pipe installation, said stop valves (2, 5) as well as associated flow meters (3, 6) being connected to a control box (8), characterized in that the control box (8) comprises,

- at least one valve monitor (9) connected to each stop valve (2, 5) to control/record the possible state of the individual stop valve (2, 5): open or closed, and

- an executer which is started by the control logics of the control box in consideration of the operating conditions of the pipe installation, and which performs a given sequence of actions during which it controls/monitors the valve monitors (9),

which leakage control system (1), on the basis of start and execution of the sequence of actions, performs a number of measurements and data collections on the basis of which it subsequently evaluates the functionality of the stop valves (2, 5) and/or the elasticity and/or the tightness of the pipe installations.

9.(Original) A leak control system (1) according to claim 8, characterized in that the control box (8) additionally comprises an analysis apparatus to record and analyze flow fluctuations in the pipe installation.

10.(Original) A leak control system (1) according to claim 8, characterized in that the stop valve (2) in the supply pipe (4) is a controllable valve, while the 1 stop valve (5) in the return pipe (7) is a controllable valve, a mechanical 30 non-return valve (10) or a combination thereof, said stop valves (2, 5) with associated flow meters (3, 6) being arranged in series with the supply pipe (4) and the return pipe (7), respectively.